



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,648	01/10/2002	Meng Chang Chen	08919-069001 / 05A-881219	6040
26161	7590	03/07/2007	EXAMINER	
FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			PITARO, RYAN F	
			ART UNIT	PAPER NUMBER
			2174	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/07/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/043,648	Applicant(s) CHEN, MENG CHANG	
	Examiner Ryan F. Pitaro	Art Unit 2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 25-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20,25-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. Claims 1-20,25-35 have been examined.

### *Response to Amendment*

2. This action is in response to the communication filed 1/25/2007. The Finality of the previous action is withdrawn; however, this action is made Final.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 25,28-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Godoy et al ("Godoy", "PersonalSearcher: An Intelligent Agent for Searching Web Pages") in view of Raskutti et al ("Raskutti", US 2006/0089924).

As per claim 25, Godoy teaches a method comprising: assigning an energy value to each category of hierarchy of categories of web pages (Page 5 lines 22-31), the

Art Unit: 2174

energy value of a category representing a user's degree of interest in the category, the energy value of a category being increased when a user accesses web pages belonging to that category (Godoy, Page 5 lines 22-31). However, Godoy fails to distinctly point out making structural changes to the hierarchy based on the energy values. However, Raskutti teaches adjusting the hierarchy of categories based on the value of each category ([0075] –[0076]). Therefore it would have been obvious to an artisan at the time of the invention to combine the teaching of Raskutti with the system of Godoy. Motivation to do so would have been to understand a single document category over time.

As per claim 28, Godoy-Raskutti teaches a method in which when the user accesses new web pages belonging to a category, the energy value of the category is increased by an amount based on cosine similarities between a category vector associated with the category and the new web pages, the category vector defining a topic of interest associated with the category (Godoy, Page 5 lines 12-31).

As per claim 29, Godoy-Raskutti teaches a method further comprising periodically reducing the energy value of each of the categories (Raskutti, [0071]).

As per claim 30, Godoy-Raskutti teaches a system in which the energy value of a category represents a user's degree of interest in the category (Godoy, Page 5 lines 22-31).

As per claim 31, Godoy-Raskutti teaches a system in which the energy value of a category is increased when a user accesses web pages belonging to that category (Godoy, Page 5 lines 22-31).

As per claim 32, Godoy-Raskutti teaches a system in which when the user accesses new web pages belonging to a category, the energy value of the category is increased based on cosine similarities between a category vector associated with the category and the new web pages, the category vector defining a topic of interest associated with the category (Godoy, Page 5 lines 12-31).

As per claim 33, Godoy-Raskutti teaches a method in which the energy value of a category represents a user's degree of interest in the category (Godoy, Page 5 lines 22-31).

As per claim 34, Godoy-Raskutti teaches a method further comprising increasing the energy value of a category when the user accesses web pages belonging to that category (Godoy, Page 5 lines 22-31).

As per claim 35, Godoy-Raskutti teaches a method further comprising, when the user accesses new web pages belonging to a category, increasing the energy value of the category based on cosine similarities between a category vector associated with the

Art Unit: 2174

category and the new web pages, the category vector defining a topic of interest associated with the category (Godoy, Page 5 lines 12-31).

5. Claims 1-4,7, 10-14,17, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al ("Chen", "6,349,307) in view of Raskutti et al ("Raskutti", US 2006/0089924) in view of Bezos et al ("Bezoz", US 6,889,250).

As per independent claim 1, Chen discloses a system for managing a personal view for a user comprising: a personal view constructor, which builds the personal view as a hierarchy of categories based on the topic page extracted by the proxy (Column 4 lines 48-60), the categories in the personal view being selected from a group of predefined categories (Column 4 lines 32-37). However, Chen fails to distinctly point out making structural changes to the hierarchy based on the energy values. However, Raskutti teaches adjusting the hierarchy of categories based on the value of each category ([0075] –[0076]). Therefore it would have been obvious to an artisan at the time of the invention to combine the teaching of Raskutti with the system of Chen. Motivation to do so would have been to understand a single document category over time. The modified Chen fails to distinctly point out a proxy for tracking a users activity. However, Bezos teaches a proxy to track web pages that have been accessed by the

Art Unit: 2174

user and extract a topic page from the web pages (column 3 lines 39-48, Column 4 lines 7-21). Therefore it would have been obvious to an artisan at the time of the invention to combine the teaching of Bezos with the modified system of Chen. Motivation to do so would have been to extract web pages that were only of interest to the user to make the system more personalized.

As per claim 2, which is dependent on claim 1, Chen-Raskutti-Bezos discloses a method wherein the personal view constructor builds the personal view by mapping the topic page into a selected category in a superset of categories and updating a corresponding category in the hierarchy (Chen, Column 5 lines 5-25).

As per claim 3, which is dependent on claim 2, Chen-Raskutti-Bezos discloses a method wherein the selected category has a category vector that is most similar to a keyword vector of the topic page (Chen, Column 5 lines 5-25).

As per claim 4, which is dependent on claim 2, Chen-Raskutti-Bezos discloses a method wherein the corresponding category is an ancestor of the selected category in the superset of categories if the selected category is not in the hierarchy (Chen, Column 8 lines 14-37, offspring).

As per claim 7, which is dependent on claim 1, Chen-Raskutti-Bezos discloses a method wherein the personal view maintainer periodically reduces the energy value of each of the categories (Raskutti, [0075]-[0076]).

As per claim 10, Chen-Raskutti-Bezos teaches a method further comprising a personal view display to display the hierarchy of categories (Raskutti, [0071]).

Claim 11 is similar in scope to that of claim 1, and is therefore rejected under similar rationale.

Claim 12 is similar in scope to that of claim 2, and is therefore rejected under similar rationale.

Claim 13 is similar in scope to that of claim 3, and is therefore rejected under similar rationale.

Claim 14 is similar in scope to that of claim 4, and is therefore rejected under similar rationale.

Claim 17 is similar in scope to that of claim 7, and is therefore rejected under similar rationale.



Claim 20 is similar in scope to that of claim 10, and is therefore rejected under similar rationale.

6. Claims 5,6,8,15,16,18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al ("Chen", "6,349,307) in view of Raskutti et al ("Raskutti", US 2006/0089924) and Bezos et al ("Bezoz", US 6,889,250) in further view of Bodnar et al ("Bodnar", 6,310,634).

As per claim 5, which is dependent on claim 1, Chen-Raskutti-Bezoz fails to disclose a split operator for hierarchical nodes. However, Bodnar discloses a method wherein the personal view maintainer splits off a child category from a parent category in the hierarchy if the energy value of the parent category is above a predetermined threshold (Column 17 lines 64- Column 18 lines 22). Therefore it would have been obvious to an artisan at the time of the invention to combine the split operator of Bodnar with the system of Chen-Raskutti-Bezoz. Motivation to do so would have been to reorganize the hierarchy to create a faster and more efficient navigation through large data sets.

As per claim 6, which is dependent on claim 5, Chen-Raskutti-Bodnar-Bezoz discloses a method wherein the personal view maintainer chooses the child category that maximizes a gain value (Bodnar, Column 17 line 64 - Column 18 line 22).

As per claim 8, which is dependent on claim 7, Chen-Raskutti-Bodnar-Bezos discloses a method wherein the personal view maintainer removes a child category from the hierarchy if the energy value of the child category is below a pre-determined threshold (Bodnar, Column 17 lines 64- Column 18 line 22).

Claim 15 is similar in scope to that of claim 5, and is therefore rejected under similar rationale.

Claim 16 is similar in scope to that of claim 6, and is therefore rejected under similar rationale.

Claim 18 is similar in scope to that of claim 8, and is therefore rejected under similar rationale.

7. Claims 26,27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Godoy et al ("Godoy", "PersonalSearcher: An Intelligent Agent for Searching Web Pages") in view of Raskutti et al ("Raskutti", US 2006/0089924) in further view of Bodnar et al ("Bodnar", 6,310,634).

As per claim 26, Godoy-Raskutti fails to teach splitting categories. However, Bodnar discloses a method wherein the personal view maintainer splits off a child category from a parent category in the hierarchy if the energy value of the parent category is above a predetermined threshold (Column 17 lines 64- Column 18 lines 22). Therefore it would have been obvious to an artisan at the time of the invention to combine the split operator of Bodnar with the system of Godoy-Raskutti Motivation to do so would have been to reorganize the hierarchy to create a faster and more efficient navigation through large data sets.

As per claim 27, Godoy-Raskutti-Bodnar teaches a method in which adjusting the hierarchy of categories includes removing a child category from the hierarchy if the energy value of the child category is below a predetermined threshold, indicating that the user's interest in the child category is below a certain threshold (Godoy, Page 6 lines 14-29).

8. Claims 9,19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Godoy et al ("Godoy", "PersonalSearcher: An Intelligent Agent for Searching Web Pages") in view of Raskutti et al ("Raskutti", US 2006/0089924) and Bezos et al ("Bezoz", US 6,889,250) in further view of Amram et al ("Amram", US 5,537,586).

Art Unit: 2174

As per claim 9, which is dependent on claim 7, Godoy-Raskutt-Bezos fails to disclose a method of merging two categories. However, Amram discloses a method wherein the personal view maintainer merges information of the child category with information of the child category's parent in the hierarchy (Column 13 lines 3-31). Therefore it would have been obvious to an artisan at the time of the invention to combine the merge operator of Amram with the method of Godoy-Raskutti. Motivation to do so would have been to avoid having stale or out of date categories.

Claim 19 is similar in scope to that of claim 9, and is therefore rejected under similar rationale.

### ***Response to Arguments***

Applicant's arguments filed 1/25/2007 have been fully considered but they are not persuasive.

Applicant argues the following main points:

a) Chen fails to disclose a proxy to track web pages that have been accessed by the user. The Examiner agrees with the applicant and applied new art in light of the oversight.

Art Unit: 2174

b) Raskutti fails to disclose adjusting according to an energy value. Applicant further states that Raskutti does not adjust the hierarchy of categories since it the hierarchy is changed by the clusterer 12. However, as disclosed in paragraph [0076] lines 14-17 of Raskutti, a clusterer, which is used to change the hierarchy, is used to create a finer partition. In other words create a sub category for the hierarchy.

c) Bodnar does not maximize a gain value by choosing a category. However, Bodnar teaches creating a new category for a group of when its parent reaches a certain threshold maintains all of the information while keeping the mostly used subcategories at the users' finger tips, which is maximizing the gain value.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2174

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan F. Pitaro whose telephone number is 571-272-4071. The examiner can normally be reached on 7:00am - 4:30pm Mondays through Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on 571-272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2174

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan Pitaro  
Art Unit 2174  
Patent Examiner

RFP

*Kristine Kincaid*  
KRISTINE KINCAID  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100